



A Message from the Director

Dear Friends:

It seems that I frequently open our yearly **Johnston County Osteoarthritis Project Update** by telling you that it has been a very busy and exciting year. Can it be that we have been working on this study with you for over 20 years now? As they say, time really does fly. We have been through a lot together, from hurricanes to recessions to droughts, and thankfully, we are still going strong as a team, thanks to people like you who continue to support the project and other related studies.



Perhaps the best piece of good news to share is that despite all the severe cutbacks in federal funding for research, we have been most fortunate to continue to receive grant support from the Centers for Disease Control and Prevention (CDC) to continue work on the ***Johnston County Osteoarthritis Project (JoCo)***. This 5-year grant renewal will help us continue our ongoing follow-up with you. We are particularly interested in understanding how OA occurs together with Diabetes and Heart Disease and other chronic

Holiday Open House

December 10 & 11 (10am-3pm)

1327 North Brightleaf Blvd.

Building G, Noble Plaza

Smithfield, NC

Reply to us if you can come: (919) 934-1295



THE JOHNSTON COUNTY
OSTEOARTHRITIS PROJECT



A Message from the Director, continued

conditions, and are leading the effort nationally through the US Bone and Joint Initiative's **Chronic Osteoarthritis Management Initiative** (usbji.org/COAMI) to improve medical care for OA in the community.

With this CDC grant, we began the 4th round of interviews and clinic visits for **JOCO** in February 2013. Many of you returning have been with us since the early 1990's! We are proud to be testing new measuring devices for neuropathy and foot arch height, and we now also have rapid digital x-ray equipment in the clinic since we finished our last phase in 2011. We have also added new X-rays of the foot and ankle this time, because so many of you have told us that these areas frequently give you trouble. You will remember that in the past, the interviews were conducted in your homes. **This time, however, you have 2 options for completing the interview:**

- 1) to complete the questionnaires online in the privacy of your own home, OR
- 2) to have the questionnaires done by an Interviewer at the end of the clinic visit

We are excited to report to you about the following other studies that are related to JOCO.

The PainCOACH Study

In July 2013, 66 **JOCO** participants completed a study entitled "**Internet-based Osteoarthritis Pain Coping Skills Intervention**" (or the **PainCOACH Study**), led by Dr. Christine Rini, PhD, UNC-Chapel Hill. This study tested a computer program being developed to help people with OA take an active role in managing their arthritis pain. Results are encouraging, and we are now finishing up contacting these folks 6 months after they finished the study to see if PainCOACH is still being used and is helpful.

Q&A

What is the difference in film x-rays and digital x-rays?

In digital x-rays, a cassette stores the images in digital pixels. (It is like using a digital camera that has a memory card. You insert the memory card into a computer to see what is on it.) After taking an x-ray, the cassette is inserted into a cassette reader (CR) that sends the image to a computer screen. There is no more developing in a darkroom and the images are ready for viewing in minutes.

A Message from the Director, continued

Limb Length Inequality Study

You may remember from past newsletters, that we have been interested in how having legs of different lengths may be related to arthritis in the knee or hip. In August 2013, we started recruiting **JOCO** participants with one leg longer than the other for another study entitled “**Defining and Correcting Limb Length Inequality in Adults with Knee and Hip Symptoms**” (or the **Leg Length Study**), led by Dr. Yvonne Golightly, PT, PhD, UNC-Chapel Hill.

This study has 3 purposes:

- 1) to learn the best way to measure whether one leg is longer than the other;
- 2) to learn whether having a high or low foot arch is related to leg length inequality; and
- 3) to learn whether shoe lifts can help knee and hip pain in this setting.

Mitigating the Public Health Impact of Osteoarthritis

Another critical piece of our research agenda was recognized by the National Institutes of Health with a recently awarded a 5-year grant to UNC’s Thurston Arthritis Research Center entitled **Mitigating the Public Health Impact of Osteoarthritis**. Two important studies are included in this new grant, one looking at OA that develops as a result of injuring the knee and another, again directed by Dr. Rini, called **Partners in Active Living Study (PALS)** that will enroll 240 people from **JOCO** and their spouses. **PALS** will focus on people with OA in the hip or knee who do not get enough exercise. The goal is to see how spouses might encourage people with OA to exercise.

What is a biothesiometer and what does it do?

The biothesiometer is an instrument used to measure the ability to feel vibration. Sometimes people who have lost the ability to feel because of problems with their nerves or because of diabetes might not be able to feel vibration.

Q&A



A Message from the Director, continued

Finally, you will be interested to know that we at UNC's Thurston Arthritis Research Center continue to work with researchers across the globe to answer important questions about what may cause arthritis, how it causes disability, and what can be done to prevent it from progressing or even occurring altogether. As you will see in other parts of this newsletter, these research teams hail from Duke and Wake Forest Universities in NC, to Harvard University in MA, to the Hospital for Special Surgery and the Hospital for Joint Diseases in NYC, to Scotland and Australia, all involving information collected these many years through **JOCO**.

And so, it really is an exciting time in arthritis research, and we look forward to seeing you during this 4th round of **JOCO**. We desperately hope to bring more people into the study in the coming years, provided we can obtain sufficient funding to do so. The project's success so far is due in large part to your continued support, and we thank you from the bottom of our hearts.

Spotlight on a JoCo OA participant



Geraldine Murphy is an 84 year old **JoCoOA** participant who says she keeps in good health by staying busy. She does her own weed-eating in her yard, stays busy with church activities and runs after her 6 great-grandchildren.

Leg Length Inequality Study

Leg length inequality exists when a person has one leg that is longer than the other. There are three things we are looking at with our new study. One is to look at ways that leg length inequality is typically assessed in the clinic (for example using tape measures) and determine which of these measurements is most similar to the results that we would get from an X-ray.

We also are looking at whether leg length inequality is related to foot arch height. For example, a person may have one arch that is high and the other is low, and this may make it appear as though one leg is longer than the other when he or she is standing.

The third thing we are examining is whether the use of shoe lifts in people with leg length inequality can help them manage their knee and hip pain.



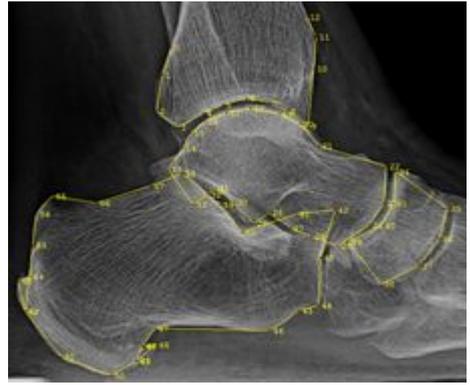
Celebrity Spotting

Janice Woodard, the JoCoOA Director, attended the 2013 N.C. Business Summit in Washington, DC and met Roy Williams, basketball coach for UNC, who was a guest speaker.

Dr. Nelson's Trip to Scotland

Amanda E. Nelson, MD MSCR, Assistant Professor of Medicine at UNC, works extensively with data from **JoCoOA** at the Thurston Arthritis Research Center. Dr. Nelson recently visited the University of Aberdeen in Scotland, where she worked with the Aberdeen osteoarthritis research group to develop models of shape changes at the ankle in osteoarthritis.

This project uses the foot and ankle images currently being taken at the **JoCoOA** Clinic in Smithfield, NC. The folks at Aberdeen, who work with research groups around the world, were very impressed at the high quality of the **JoCoOA** x-rays, a credit to Sue Guin, **JoCoOA**'s Radiographer.



Shape model of the lateral ankle



Sue Guin at the JoCoOA Clinic.



Dr. Nelson in front of Dunnottar Castle in Scotland

Donor's Corner

We would like to recognize those who support the work we do with financial donations to **JoCoOA**.



Chris Gridley in the dunking booth at the Physical Therapy carnival open house

"You have a fantastic project that benefits not only the Johnston County people but people throughout the world. It is such a wide scope of research and we are happy to contribute in any way we can."

Chris Gridley, PT, MPT
Advanced Physical Therapy of Smithfield

Gift Contact Information:

If you or someone you know might be interested in helping to support our mission, please contact [Jennifer Bullard@unc.edu](mailto:Jennifer.Bullard@unc.edu)